

What is claimed is:

1. A method for managing software program code for risk related to errors
5 associated with interpretation of such program code by determining acceptable program
codes to reduce such errors, the method comprising the steps of:
establishing a criterion denoted as a code difference criterion for determining one or more
acceptable program codes;
selecting a first candidate program code;
10 selecting a first set of other candidate program codes have a predetermined number of
member candidate program codes; and
determining whether the first candidate program code is an acceptable program code
based on a comparison of the first candidate program code to each member of the first set
of other candidate program codes in accordance with whether the code difference
15 criterion is satisfied.

2. The method of claim 1, wherein the code difference criterion includes a
requirement that the acceptable program code have a binary equivalent that when
compared to each respective binary equivalent of each member of the first set of other
20 candidate program codes has a minimum predetermined number of bits difference from
each member.

3. The method of claim 2, wherein a plurality of acceptable program codes are determined based on a plurality of comparisons of a plurality of candidate program codes to a plurality of sets of other candidate program codes, wherein each candidate program code of the plurality of candidate program codes is selected from a universal group
5 consisting of the first candidate program code and the first set of other candidate program codes and each member of each set of other candidate program codes of the plurality of other candidate program codes is also selected from the universal group.

4. The method of claim 3, wherein the plurality of acceptable program codes each
10 satisfy the code difference criterion by having a minimum 2-bits difference from each other acceptable program code.

5. The method of claim 4, wherein the number of acceptable program codes is less than the predetermined number of member candidate program codes.

6. The method of claim 5, wherein the predetermined number of member candidate program codes is a multiple of a number of distinct codes required.

7. The method of claim 6, where the multiple is 2.

8. The method of claim 2, wherein the predetermined number of member candidate program codes is a predetermined multiple of a number of distinct codes required.

9. The method of claim 8, wherein the predetermined number of bits is 2.

10. The method of claim 8, wherein the predetermined multiple of a number of distinct codes is 2.

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11. The method of claim 1, wherein the program code is used with a data storage system.

12. A program product for managing software program code for risk related to errors associated with interpretation of such program code by determining acceptable program codes to reduce such errors, the program product being comprised of:

computer-executable logic contained on a computer-readable medium and which is configured for causing the following computer-executed steps to occur:

establishing a criterion denoted as a code difference criterion for determining one or more acceptable program codes;

selecting a first candidate program code;

selecting a first set of other candidate program codes have a predetermined number of member candidate program codes; and

determining whether the first candidate program code is an acceptable program code based on a comparison of the first candidate program code to each member of the first set of other candidate program codes in accordance with whether the code difference criterion is satisfied.

13. The program product of claim 1, wherein the software program code is used with a data storage system.